

**REMARKS**

As a preliminary matter, Applicants respectfully request the Examiner to consider and initial the references cited in the Information Disclosure Statement filed on April 30, 2001, in the next Office Action.

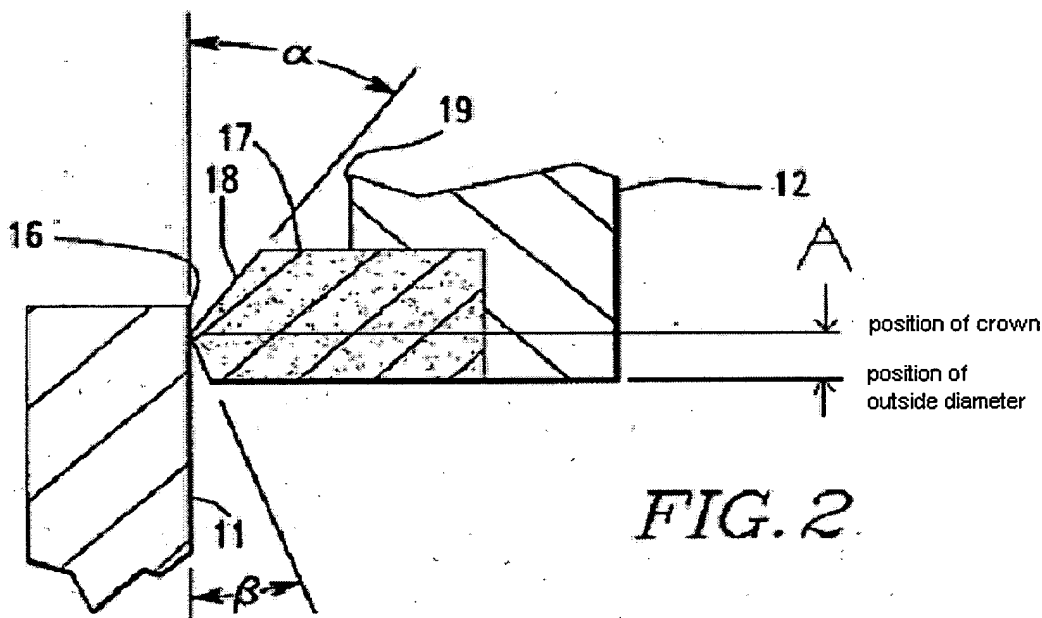
Claims 1-18 are pending in the application. Claims 1 and 15-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Potsch et al. (U.S. Patent No. 3,788,180) ("Potsch"). Claims 2-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Potsch in view of DeTorre (U.S. Patent No. 5,365,821) ("DeTorre") and in further view of Munier et al. (U.S. Patent No. 5,365,821) ("Munier"). Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Potsch in view of DeTorre in further view of Munier and in further view of Paavola (U.S. Patent No. 4,972,750) ("Paavola"). Claims 6 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Potsch. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Potsch in view of DeTorre. Applicants submit the following amendments and arguments to traverse the prior art rejections.

Applicants' invention relates to a disk-shaped rotary blade of a slitter blade assembly in an embodiment. Applicants refer the Examiner to the description of the Applicants' invention and the cited references in the October 8, 2003 Amendment.

**Rejection of claims 1 and 15-17 under § 102(b) over Potsch**

Applicants respectfully submit that claim 1 is patentable because the Examiner has not established a *prima facie* case of obviousness because the references, either individually or in a combination, fail to teach, suggest, or provide motivation for a slitter blade assembly wherein a

first distance of said first beveled surface up to said edge along a severance plane perpendicular to a surface of the workpiece is set to a value which ranges from  $40\text{ }\mu\text{m}$  to  $200\text{ }\mu\text{m}$ , in combination with other elements of the claim. In DeTorre, the crown is located at the tip of the tungsten carbide ring closest to the planar surface of the wheel 11. Further, the “crown should be located about 0.035-0.065 inches short of the *outside diameter*.” (col. 2, 66-68) (emphasis added). Thus the range of 0.035-0.065 inches lies at the distance between the two arrows, at “A”, in the figure below (Fig. 2 of Potsch with additional explanatory labels):



Thus, the distance from the crown to the bottom of the wheel 12 or the position of the outside diameter is 0.035-0.065 inches, or  $889\text{ }\mu\text{m}$  -  $1651\text{ }\mu\text{m}$ , which is nowhere near the first distance (CL) of said first beveled surface up from said cutting edge along a severance plane perpendicular to a surface of the workpiece set to a value which ranges from  $40\text{ }\mu\text{m}$  to  $200\text{ }\mu\text{m}$ , in the manner claimed.

In the Office Action, it appears that the Examiner is calculating a range which is the vertical distance (as oriented in the figure above) from the crown to the top of the square cutting edge 16. The Examiner cannot characterize this vertical distance as the claimed first distance of the first beveled surface because such a characterization would be entirely inconsistent with his characterization of the first beveled surface as having angle  $\beta$  (shown in the figure above). If the first beveled surface is to have the angle  $\beta$ , then the first vertical distance would be "A," not the vertical distance the Examiner suggest. For at least the reasons above, claim 1 is patentable.

Claims 15-16, which depend from claim 1, are patentable for at least the reasons submitted for claim 1.

Alternatively, or in addition, Applicants respectfully submit that claims 16 and 17 are patentable because Potsch fails to teach or suggest means for rotating the drum shaft in unison with the disk shaft, in combination with other elements of the claims. Although the Examiner argues that such a feature is inherently disclosed, Potsch suggests the opposite in that the reference discloses "means for causing [sic] said knives and anvils to be driven *relative to* one another for cutting the sheets." Col. 6, lines 58-59 (emphasis added). The disclosure of "relative to" suggests that the knives and anvils are not rotated in unison, but are rotated at different speeds. Thus, the claimed means for rotating the drum shaft in unison with the disk shaft is not inherently disclosed by Potsch and claims 16 and 17 are patentable.

Rejection of claims 2-4 under § 103(a) over Potsch in view of DeTorre

Claims 2-4, which depend from claim 1, are patentable for at least the reasons submitted for claim 1.

Rejection of claim 5 under § 103(a) over Potsch in view of DeTorre in further view of Munier

Applicants submit that claim 5, which ultimately depends from claim 1, is patentable for at least the reasons submitted for claim 1 and because Munier fails to make up for the deficiencies of Potsch and DeTorre.

Rejection of claims 6 and 18 under § 103(a) over Potsch

Applicants submits that claim 6 is patentable because Potsch fails to teach, suggest, or provide motivation for the subject matter of claim 6. Although the Examiner concedes that Potsch fails to mention the claimed cutting edge, the Examiner states that such a feature would have been obvious without providing any prior art references. Applicants submit that “[t]his method of analysis is founded on legal error because it substitutes supposed per se rules for the particularized inquiry required by section 103. It necessarily produces erroneous results.” *In re Ochiai*, 71 F.3d 1565, 1570 (Fed. Cir. 1995). In fact, in *In re Ochiai*, the Court provided a detailed clarification of what it perceived to be a frequent misunderstanding among examiners.

The use of per se rules, while undoubtedly less laborious than a searching comparison of the claimed invention -- including all its limitations -- with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. Per se rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. Indeed, they have been sanctioned by the Board as well. But reliance on per se rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention as claimed in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. We once again hold today that our precedents do not establish any per se rules of obviousness, just as those precedents themselves expressly declined to create such rules. Any conflicts as

may be perceived to exist derive from an impermissible effort to extract per se rules from decisions that disavow precisely such extraction.

*In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Applicants request the Examiner to provide prior art to substantiate the claim that a slitter blade assembly wherein said edge of the disk-shaped rotary blade has irregularities along a circumference of the disk-shaped rotary blade, said irregularities having an irregularity quantity G set to a value which ranges from 0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ , is obvious. Without such prior art, Applicants submit that claim 6 is patentable.

Claim 18, which depends from claim 6, is patentable for at least the reasons submitted for claim 6.

Rejection of claim 7 under § 103(a) over Potsch in view of DeTorre

Claim 7, which depends from claim 1, is patentable for at least the reasons submitted for claim 1.

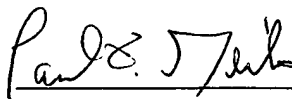
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appln. No. 09/843,765

Q63763

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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**23373**

CUSTOMER NUMBER

Date: March 30, 2004